Mechanism for the Generation of Spinless Photons with Application for Advanced Magnetometer Function - Supports Infinitely Variable Spin Speed Hypothesis for Photons and Electrons

17 December 2023
Simon Edwards
Research Acceleration Initiative

Introduction and Novel Theoretical Insights

Little is actually known about the inter-relationship between light's phase height and its wavelength, but the two values generally have a (mostly) consistent relationship with one another. For some reason, light's phase height is always right around 2% of its wavelength. Considering the recent publication concerning the conservation of energy through transference of angular momentum into axis spin in photons (and electrons, necessarily,) it stands to reason that light's property of frequency (sometimes referred to as its energy level) is governed by the amount of spin energy in each photon. This is determined, I would posit, in turn, by three factors in an electron-electron reflection (A.K.A. a light emission:) The number of electrons involved in the collision with a singlet, the velocity of the electrons involved in the collision and how squarely the triplet (or more) strikes the singlet.

The greater the rate of spin, the faster the cycle of inversion of spin. This is the reason why phase height becomes increasingly marginal as "energy level" increases. The claim that spin is infinitely variable and that a type of energy is pent up in this spin (in photons and electrons) remains a controversial one, but is verified by the consistent relationship between phase height and wavelength. If spin were present but were constant, phase height would be the same for light regardless of its frequency. Furthermore, frequency, itself, is infinitely variable. This infinite variability could only be supported by a variable spin velocity of a spherical particle.

Each time light is generated or reflected, a total amount of energy greater than the value "C" tends to be present. The velocity of light, except under special circumstances (sc. discrete magnetism is amplified by spin accelerated by skyrmion lattice skimming) cannot exceed C (as a value of velocity.) When two electrons collide, their combined speed oftentimes exceeds C as they are moving in opposing directions. In this way, light can be generated with a level of force that exceeds the theoretical limit. Furthermore, when spin in increased, inertia decreases without the need for mass to decrease. This means than a cluster of electrons moving at 10% of C can easily invert the direction of a photon and re-accelerate it to 100% of C due to the transient inertial dampening brought about by the condition of hyperspin present during reflection. The exceeding energy, much as in reflection events, is, I posit, translated into rotational energy and this excess manifests itself as increasing levels of "frequency" or "energy."

Abstract (For Magnetically Inert Photon Magnetometer (MIPM))

Given the premise that both photons and electrons have a tendency to spin on their own axis and that this axis spin tends to move in the inverse direction as the direction of phase and inverts with a brief pause in spin at the peak of each phasing of light, and given furthermore the premise that these pauses cause the magnetic moment of the photon to be briefly reduced to zero or near-zero, it may be inferred that if a single photon were made to be segregated from a wave of light at the instant of zero-spin, that photon might continue on with zero spin and therefore zero magnetic moment as it travels through space. In an atmospheric vacuum, such a photon would be highly susceptible to the influence of EM in a way that ordinary light would not be.

Typically, it is difficult to get light to substantially alter the trajectory, phase, or frequency of other light, particularly when the light is moving perpendicular to the light being used a baseline. If a photon could be made to have no magnetic moment of its own, it would be highly susceptible to scattering (in many ways, the inverse of the recently described helical light in a recent publication) and could be caused to change its trajectory measurably by even the faintest of radio waves.

If one were to start with polarized light, a simple light-absorbing panel (of perhaps about 20nm in height) could be used to separate the vast majority of a light wave from a single photon at the crest of the wave. If a single photon were separated from a light wave at the exact peak of phase, it would necessarily be without spin and therefore also without discrete magnetism, making it vulnerable to scattering (i.e. angular redirection) by any magnetic influence (e.g. the electrons in atmospheric molecules or the photons comprising radio waves.) If one were to project many of these spinless photons through a detector chamber (consisting of an atmospheric vacuum, necessarily) and measure their course deviation, these course deviations could be used to infer the content of radio signals of various frequencies with a sensitivity that far exceeds that of rubidium vapor magnetometers.

This can be possible because in the case of the rubidium vapor magnetometer, electrons are stabilized through their ultra-low temperature so that changes in their spin orientation can be measured. These electrons, however, have a comparatively high mass versus a photon. Thus, if a photon (in flight) could be made to perform the basic task of the valence electrons in a rubidium vapor magnetometer (sc. to respond to EM in the environment in a way that can be measured and used to deduce the characteristics of that EM,) its low mass would make it exceptionally sensitive to external influence. The mode of measurement of this influence is, in fact, simpler and more manageable than the measurement of electron spin through spin torque as in an RVM.

Conclusion

As polarizing light and creating barriers to block light are examples of intrinsically simple, low-cost propositions and the aforementioned method

requires only atmospheric vacuum in a diminutive chamber and does not require cold temperatures, this approach to hypersensitive radio detection is the logical next step in magnetometer design. Precise measurement of the strike position of these spinless photons relative to the expected position would constitute perhaps the most sophisticated element of the overall mechanism.

In exploring this concept, the theory underpinning the nature of light phasing has been corrected and improved, a fact which should increase the likelihood of further advances in optics that might be hampered by false assumptions such as the assumption that photons do not have axis spin.